20041022.ba v03_n718.bam.20041022

>From ???@??? Fri Oct 22 02:35:25 2004 -0600
Message-Id: <200410220734.i9M7Yraa012968@sco.theporch.com>
Date: Fri, 22 Oct 2004 02:34:17 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3718

BOATANCHORS Digest 3718

Topics covered in this issue include:

1) Re: [BULK] Re: 220v hook up
by wb3fau@att.net
2) Server Error (boatanchors@theporch.com)
by roy.morgan@nist.gov
3) Re: [BULK] Re: 220v hook up
by Bob Roehrig <broehrig@aurora.edu>
4) Re: [BULK] Re: 220v hook up
by "Paul Christensen" <w9ac@arrl.net>
5) RE: bonding grounds and neutrals
by john <johnmb@nc.rr.com>
6) WTD: Hammarlund parts
by "Al Parker" <anchor@ec.rr.com>
7) Re: bonding grounds and neutrals
by "Tom Rauch" <w8ji@contesting.com>
8) Looking for ARC-5 receiver dynamotor mounts and top cover plate
by Charles <charlesmorris@direcway.com>
9) [FWD: 500 kc/s]
by Jerry Proc <jerry.proc@sympatico.ca>
10) Re: 500 kc/s]
by "Hue Miller" <kargo_cult@msn.com>
11) Delivered Message (boatanchors@theporch.com)
by wmills@gmc.cc.ga.us
12) ADMINISTRIVIA: Over Quoting
by listown@nanniandjack.com (Mail List Owner)
13) AN/PSM-6
by JOHN.SEHRING@ecunet.org
14) HP 410B VTVM QUERIES
by JOHN.SEHRING@ecunet.org
15) Re: HP 410B VTVM QUERIES
by John Shriver <jshriver@internap.com>
16) Re: HP 410B VTVM QUERIES
by Garey Barrell <k4oah@mindspring.com>
17) Re: HP 410B VTVM QUERIES
by "Arden Allen" <gumbear@pacbell.net>

From: wb3fau@att.net
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>, John Page <k4kwm@hotmail.com>
Subject: Re: [BULK] Re: 220v hook up
Date: Tue, 19 Oct 2004 04:47:46 +0000
Message-Id:
<101920040447.23549.41749C70000C8B1500005BFD21602807489A0E00CC0D99@att.net>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="NextPart_Webmail_9m3u9jl4l_23549_1098161266_0"

--NextPart_Webmail_9m3u9jl4l_23549_1098161266_0
Content-Type: text/plain
Content-Transfer-Encoding: 8bit

Sorry Bob, not meaning to confuse anyone. As stated, some of the amps
use
120volts from the source[fuse box or breaker panel], as well as 240 volts to
run the transformer. If aux. devices such as fans or QRO relay coils are 120
volt,
chances are real good they will run on the source, in this case, you need the
neutral,
you should not connect these devices to hot and ground, rather hot and
neutral. Russ.

-------------- Original message from Bob Roehrig : --------------

> On Sun, 17 Oct 2004 wb3fau@att.net wrote:
>
> > OK, Bob, in the case of your amp- use the 2 hots- black and red, and
> > connect the green wire. You do not need the neutral for your hook up.
> > In the connection of the Johnson desk, you should use the neutral, as
> > 120volts is needed from the source. Ground supplies a path for fault
> > currents only. Yes, the neutral and ground are tied together in the
> > main panel. So, you can argue the point, but this is what the code
> > requires. Russ.
>
> That's a bit confusing, the way you put it. First you say "you do not need
> the neutral" then you say "you should use the neutral, as 120V is needed".
>
> The original Johnson connected the neutral to the chassis. Some of the
> innards ran off hot/neutral for 120V and the plate supply ran off the
> 240V. In my rewiring, that is the same way except neutral is now NOT
> connected to the chassis and the chassis is grounded thru a 4th lead:
>
> RED = hot phase A

```
> BLK = hot phase B
> WHT = neutral
> GRN = ground
>
> Bob Roehrig
> Aurora University Telecom dept.
> broehrig@aurora.edu 73 de K9EUI
> 630-844-4898 fax 630-844-4222
> "Nostalgia is a thing of the past"
--NextPart_Webmail_9m3u9jl4l_23549_1098161266_0
Content-Type: text/html
Content-Transfer-Encoding: 8bit

<html>
<!-- BEGIN WEBMAIL STATIONERY -->
<head><style type='text/css'>
p {
margin: 0px;
}
</style></head>
<body>
<!-- WEBMAIL STATIONERY noneset -->
<P>Sorry Bob,&nbsp; not&nbsp; meaning&nbsp; to&nbsp; confuse&nbsp;
anyone.&nbsp;&nbsp;&nbsp; As stated,&nbsp; some of the amps&nbsp; use</P>
<P>120volts&nbsp; from&nbsp; the&nbsp; source[ fuse box&nbsp; or breaker panel],
as well as 240 volts to </P>
<P>run the transformer.&nbsp; If aux. devices such as fans or&nbsp; QRO relay
coils&nbsp; are 120 volt,</P>
<P>chances&nbsp; are&nbsp; real good they will run on the source,&nbsp; in
this&nbsp; case,&nbsp; you need the&nbsp; neutral,</P>
<P>you should not connect&nbsp; these devices to&nbsp; hot and&nbsp; ground,&nbsp;
rather&nbsp; hot&nbsp; and neutral. Russ.<BR></P>
<BLOCKQUOTE style="PADDING-LEFT: 5px; MARGIN-LEFT: 5px; BORDER-LEFT: #1010ff 2px
solid">-------------- Original message from Bob Roehrig <BROEHRIG@AURORA.EDU>:
-------------- <BR><BR>&gt; On Sun, 17 Oct 2004 wb3fau@att.net wrote: <BR>&gt;
<BR>&gt; &gt; OK, Bob, in the case of your amp- use the 2 hots- black and red, and
<BR>&gt; &gt; connect the green wire. You do not need the neutral for your hook
up. <BR>&gt; &gt; In the connection of the Johnson desk, you should use the
neutral, as <BR>&gt; &gt; 120volts is needed from the source. Ground supplies a
path for fault <BR>&gt; &gt; currents only. Yes, the neutral and ground are tied
together in the <BR>&gt; &gt; main panel. So, you can argue the point, but this is
what the code <BR>&gt; &gt; requires. Russ. <BR>&gt; <BR>&gt; That's a bit
confusing, the way you put it. First you say "you do not need <BR>&gt; the
neutral" then you say "you should use the neutral, as 120V is needed". <BR>&gt;
<BR>&gt; The original Johnson connected the neutral to the chassis. Some of the
<BR>&gt; innards ran off hot/neutral for 120V and the plate supply ran off the
<BR>&gt; 240V. In my rewiring, that is the same way except neutral is now NOT
<BR>&gt; connected to the chassis and the chassis is grounded thru a 4th lead:
```

```
<BR>&gt; <BR>&gt; RED = hot phase A <BR>&gt; BLK = hot phase B <BR>&gt; WHT =
neutral <BR>&gt; GRN = ground <BR>&gt; <BR>&gt; Bob Roehrig <BR>&gt; Aurora
University Telecom dept. <BR>&gt; broehrig@aurora.edu 73 de K9EUI <BR>&gt;
630-844-4898 fax 630-844-4222 <BR>&gt; "Nostalgia is a thing of the past" </
BLOCKQUOTE>
<!-- END WEBMAIL STATIONERY -->

</body>
</html>

--NextPart_Webmail_9m3u9jl4l_23549_1098161266_0--

------------------------------
Message-Id: <200410191140.i9JBe6wd027884@sco.theporch.com>
From: roy.morgan@nist.gov
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Server Error (boatanchors@theporch.com)
Date: Tue, 19 Oct 2004 08:37:13 -0200
MIME-Version: 1.0
Content-Type: multipart/related;
     type="multipart/alternative";
     boundary="----=_NextPart_000_001B_01C0CA81.7B015D10"

This is a multi-part message in MIME format.

------=_NextPart_000_001B_01C0CA81.7B015D10
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---            *
*     This post contains a forbidden message format       *
*  (such as an attached file, a v-card, HTML formatting)  *
*    Mail Lists at theporch.com only accept PLAIN TEXT    *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------=_NextPart_000_001B_01C0CA81.7B015D10--

------------------------------
Date: Tue, 19 Oct 2004 08:44:28 -0500 (CDT)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>, John Page <k4kwm@hotmail.com>
Subject: Re: [BULK] Re: 220v hook up
Message-ID: <Pine.OSF.4.58.0410190844030.394458@mail.aurora.edu>
MIME-Version: 1.0
```

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 19 Oct 2004 wb3fau@att.net wrote:

> Sorry Bob, not meaning to confuse anyone. As stated, some of the amps use
> 120volts from the source[fuse box or breaker panel], as well as 240 volts to
> run the transformer. If aux. devices such as fans or QRO relay coils are 120 volt,
> chances are real good they will run on the source, in this case, you need the neutral,
> you should not connect these devices to hot and ground, rather hot and neutral. Russ.

OK gotcha. Full agreement.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu 73 de K9EUI
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <005901c4b5e2$4663d2c0$6501a8c0@Dorm>
From: "Paul Christensen" <w9ac@arrl.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: [BULK] Re: 220v hook up
Date: Tue, 19 Oct 2004 09:48:07 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> If aux. devices such as fans or QRO relay coils are 120 volt,
> chances are real good they will run on the source, in this case, you need the neutral,
> you should not connect these devices to hot and ground, rather hot and neutral. Russ.

Excellent point.

-Paul, W9AC

Message-Id: <3.0.3.32.20041019172905.01ff850c@pop-server.nc.rr.com>
Date: Tue, 19 Oct 2004 17:29:05 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@nc.rr.com>
Subject: RE: bonding grounds and neutrals
Mime-Version: 1.0
Content-Type: multipart/mixed; x-avg-checked=avg-ok-1B856134;
boundary="=======6DF72E49======="

--=======6DF72E49=======
Content-Type: text/plain; x-avg-checked=avg-ok-1B856134; charset=us-ascii
Content-Transfer-Encoding: 8bit

At 09:17 PM 10/18/04 -0500, Bill Hawkins wrote:
>
>Tom Rauch with the copper pipe ground plane around his house has
>the best possible ground system, as his experience with lightning
>showed. It isn't any better connected to the mythical Mother Earth
>ground, but it is a zero volt plane of reference when anything bad
>happens. Putting a ground rod at each end of the house is useless.
>The one nearest to the lightning strike will rise to a higher
>voltage than the other one, even if they are bonded together by
>any practical wire size.
>

OK, now I'm confused.

Isn't Tom's setup essentially what you just said is useless (ie, conductors of any size, ringing his foundation)?

John

--=======6DF72E49=======
Content-Type: text/plain; charset=us-ascii; x-avg=cert; x-avg-checked=avg-ok-1B856134
Content-Disposition: inline

Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.727 / Virus Database: 482 - Release Date: 7/26/04

--=======6DF72E49=======--

Message-ID: <1a4701c4b63a$39a74b40$5901a8c0@w8ut>

From: "Al Parker" <anchor@ec.rr.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: WTD: Hammarlund parts
Date: Tue, 19 Oct 2004 20:17:43 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi all,

I'm the recipient of the mail that's directed to "contact us" on The Hammarlund Historian website. As such, I often get questions like "can you supply, or suggest a source for, XX part." Usually the part is something that's unique to the radio, such as knobs, dials, coils, etc, and sometimes it's something that can be subsituted for, like an audio xfmr. Often, the sender is not on any of the email lists, tho' I often suggest that they join, and post a query. Sometimes they do.

Here's a list of the recent "wants" for people other than me personally:

1. Bandspread dial for SP-200 Super Pro
2. Knurled knob for the Xtal switch or "delta freq" for SP-600
3. Front panel "R-274" tag for SP-600
4. Plastic cover for extra fuses for SP-600
5. DPDT toggle switch, original style with short handle, for MOD/CW for SP-600
6. Dial glass (plastic) for SP-600
7. RF/Audio meter for SP-600
8. contacts on the rf deck "strip" that contact the studs on the rotating turret

Few, of these can be substituted for, tho' some reproductions are available commercially.

I have several SP-600's of my own, none of which is unrestorable, but some are missing parts, some needing some of those listed above. If anyone has any of these parts, I will give other requesters the opportunity to take advantage of first "dibs" on them. I am interested in purchasing SP-600's in restorable or unrestorable condition. The latter will be used as parts donors.

73,
Al, W8UT
New Bern, NC
BoatAnchors appreciated here
http://www.thecompendium.net/radio/
http://www.hammarlund.info

Message-ID: <002401c4b63f$c70672e0$6501a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: bonding grounds and neutrals
Date: Tue, 19 Oct 2004 20:57:30 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> > The one nearest to the lightning strike will rise to a higher voltage than the other one, even if they are bonded together by any practical wire size.
>
> OK, now I'm confused.
>
> Isn't Tom's setup essentially what you just said is useless (ie, conductors of any size, ringing his foundation)?

The system I have isn't so much to tie in multiple rods, it is to ensure the house and the earth around it rises at a similar rate. Critical points like the service entrance and radio room cable entrance are bonded with wide flashing making a bee-line under the house, reducing potential difference and current flow through paths in the house such as heating, plumbing, or wiring.While not perfect, this solution works for me despite the fact my radio and power service entrances are not next to each other.

This is a lot different than having two ground rods at opposite ends of the house with a high impedance path outside the house that doesn't look that much better than the internal wiring or worse yet no external connection at all between two grounds!

As additional protection I have a single point ground at my desk area that bonds to the cable entrance and all RF, power, and telco lines bypass at that point. I meet code because all safety grounds (they are allowed to be grounded) bond there, and the neutrals and hot leads are bypassed there.

I have similar clusters at consumer equipment, like the entertainment system, where I have a surge protector outlet strip with CATV connectors and telco connectors. Everything feeds from that strip, so it is a common ground.

This type of system may be overkill for people without multiple big towers living in the lightning belt, but it not only works for lightning it keeps RF out of the phone lines, computers, and VCR's/TV's. That way my wife can watch GH while I Ham. A system doesn't have to be this involved, but the concept of single point is a good one. I just have more hits than normal, so I spent extra time.

73 Tom

Date: Tue, 19 Oct 2004 20:31:09 -0500
From: Charles <charlesmorris@direcway.com>
Subject: Looking for ARC-5 receiver dynamotor mounts and top cover plate
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <skfbn0dpi2e46rdlbntfu8vpsomke189cc@4ax.com>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

Like it says in the subject line... I need the four shock-mounts that support the dynamotor on the rear deck of an ARC-5 receiver. Mine are completely missing.

Also need an aluminum (i.e. natural finish) top cover plate for the same receiver. Will reimburse for reasonable price plus postage.

thanks
Charles, WB3JOK

Message-ID: <41770435.B76419B0@sympatico.ca>
Date: Wed, 20 Oct 2004 20:35:02 -0400
From: Jerry Proc <jerry.proc@sympatico.ca>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: [FWD: 500 kc/s]
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Subject: 500 kc/s
Date: Wed, 20 Oct 2004 13:51:00 -0400
From: n1ea@arrl.net
To: Sparks List <n1ea@arrl.net>

This message is getting the run of the mail lists, but since Finbar is a member of this list, he probably would like to see the circulation. For my part, I am forwarding it onward to the USA 600 meter research group (shmrg).

The message below was received from Lionel 2U0GSY "Lionel Roithmeir" <roith@guernsey.net> who is a member of the marinecomms@yahoogroups.com list.

73

DR

David J. Ring, Jr., N1EA
Green Harbor, MA 02041

Date: Tue, 19 Oct 2004 23:40:30 +0100
From: "Lionel Roithmeir" <roith@guernsey.net>
Subject: 500 KHz

Hi all,

a copy of a posting from NDB List which may be of some interest.

There has been a number of postings regarding the possible use of frequencies near 500 khz for use as an Amateur Radio band. I would like to add some views of my own.

As a matter of fact I was the last person to key the 500 Khz transmitters at Malin Head Radio, sending the final CQ de EJM on the 31st December 1988. The same night that PCH closed down from Holland on 500 khz.

This range of frequencies provide wonderful opportunites for long distant transmission and reception, even using relatively low power.

Considering the way Amateur Radio has developed over the last few years, with the end of Morse requirements etc etc, I think those who feel edgy about the possible use of near 500 khz frequencies may find in fact, that just like 136 khz, there are very few operators who will be willing to go to the effort to put a signal on the air and those more recently licenced may not even be able to operate there due to not having developed the skill to use Morse code.

I have a deep respect for the History of 500 khz and am quite familiar with past events. It was a terrific distress frequency and I am sad that it has all ended. However one has to accept what is reality. It's all over, ended, finished. Never to return.

The objection to the use on the actual frequency of 500 khz is understandable but I don't accept this reasoning. I would rather see it being used and continue as a Morse frequency than become an everlasting minute of silence , to no purpose.

On a more practical note, the use of 500 khz today is rather questionable anyway. TV timebase and computer use has all but ruined 500 khz for reception in almost 100 per cent of cases. I know from experience whilst I tried to record the last 8 or 9 years of actual 500 khz use before close down. It was a nightmare trying to find a quiet spot to make recording. I eventually resorted to setting everything up in a field away from all the electronic noises generated on 500 khz. You can imagine how impractical all that was, but I did manage severa

Considering the experience I gained on 136 khz for almost 3 years, I think the small segments proposed should be wide enough and should not prove a problem in use. The developments in Amateur radio use and technology perhaps means we may in fact be chasing a very small number of users and a general area of the radio spectrum vacated by commercial beacons etc to other more modern systems will provide even more segments for use by experimenters.

I hope this new band is activated as soon as possible. I will be one of the first to apply for a licence. I will have no trouble putting a signal out "on-air". Just think we could have a whole new area of chasing moderate to weak signals, hopefully from all over Europe. Wonderful.

Finbar O'Connor EI0CF and EJM

Marine Radio Officer for 36 years, 29 years at Malin Head Radio/EJM
(Still serving).

Note : Please post on the above to those groups who may be interested in this subject.

--

Regards,
Jerry Proc VE3FAB
Toronto, Ontario
e-mail: jerry.proc@sympatico.ca
http://webhome.idirect.com/~jproc/ve3fab

From: "Hue Miller" <kargo_cult@msn.com>
To: Old Tube Radios <boatanchors@theporch.com>

```
Subject: Re: 500 kc/s]
Date: Thu, 21 Oct 2004 01:09:29 -0700
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Message-ID: <BAY5-DAV2Wwr2UAaTzv00000c07@hotmail.com>

What i think is the really intriguing possibility of this band is, being able to
power up some wonderfully soulful equipment: military LF equipment,
including aircraft; ship radios; lifeboat and SOS emergency equipment,
but hand keyed!
Hue Miller

------------------------------
Message-Id: <200410211554.i9LFslvf002360@sco.theporch.com>
From: wmills@gmc.cc.ga.us
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Delivered Message (boatanchors@theporch.com)
Date: Thu, 21 Oct 2004 13:48:53 -0200
MIME-Version: 1.0
Content-Type: multipart/mixed;
     boundary="----=_NextPart_000_0016----=_NextPart_000_0016"

This is a multi-part message in MIME format.

------=_NextPart_000_0016----=_NextPart_000_0016
Content-Type: text/plain;
     charset="Windows-1252"
Content-Transfer-Encoding: 7bit


Delivery Agent - Translation failed

------------- failed message -------------
Mj3z_gRh6);Fpld-zJ$S(2$-ILzbZ1?uVqNzagy%.>
,Va‰|<GYSbxB3.*o0^0-&zZ5z<c*8tSJX^'v;_kEFM^
~!h+8x!$#t¸VtMcQzzWRmsUOu+cﬄ,&Kjg8a3‰9|6X4d2
)SBCL^vDsdOc(0)m3Vem^Tn4kcSI

Partial message is available and has been sent as a binary attachment.


------=_NextPart_000_0016----=_NextPart_000_0016
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---           *
*     This post contains a forbidden message format      *
*  (such as an attached file, a v-card, HTML formatting)  *
*    Mail Lists at theporch.com only accept PLAIN TEXT    *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

------=_NextPart_000_0016----=_NextPart_000_0016--

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```

Message-Id: <200410211815.i9LIF0V2016714@osr506.nanniandjack.com>
From: listown@nanniandjack.com (Mail List Owner)
To: Old Tube Radios <boatanchors@theporch.com>
Subject: ADMINISTRIVIA: Over Quoting
Date: Thu, 21 Oct 2004 11:15:00 -0700 (PDT)

Gang-

Apparently the gentle nudge and suggestion approach to the issue of improving the quality of posts to the BoatAnchors list, and maintaining our excellent (and high) signal to noise ratio is falling on DEAF EYES!

PLEASE READ THIS AND SAVE IT BECAUSE IT IS IMPORTANT!!!

The list culture is to include only those portions of a prior post that are required to maintain the context of your comments. We have always tried to reduce the amount of "chaff" on the list, and this is one good way.

In private mail between you, a subscriber, and me, as list manager, I really don't care one way or the other, but when posting to the list, there are at least two issues of concern:

1) the increased bandwidth from including extra text.
   With the trial subscriptions and full members, the number of copies of each post mailed out change the impact of each extra word so that each single character becomes 1,000 characters of mail!

2) by not editing out included text, it sends a not at all subtle message to the list, that the poster considers his/her own time required to merely swipe his mouse across the text and tap the delete key, to be more valuable than the collective time and energy of the 600-700 readers on the list... not exactly a "positive" message! ;^)

This isn't rocket science... you place the pointer at the top of the message you are including *parts* of, and click-drag to where you need to include, and then hit the backspace or delete key... painless, easy, quick, and very helpful to the list.

PLEASE begin to pay attention to this... those who consistently can not be bothered to be considerate of the list will forfeit posting privileges and risk not being invited back for membership.

Treat the list as a symposium. In such an environment, with 600 others attending who have paid to be there, it is unlikely you would repeat someone else's portion of a conversation in its entirety as part of your own remarks... it would become very tedious, very quickly, if you did... especially if you repeated even the closing signature block of the previous message.

Thanks for your understanding and help in making the boatanchors list have the highest signal to noise on the InterNet.

--
73
Jack, W4KH/Mobile - - - BoatAnchor Mailing List Owner - - -
listown@nanniandjack.com - "Plus ca change, plus c'est la meme chose"
"Il n'y a que les idiots qui ne changent jamais d'idee"
Thu Oct 21 11:15:00 PDT 2004

Date: Thu, 21 Oct 2004 16:02:21 -0400 (EDT)
Message-Id: <200410212002.i9LK2LgT484637@wine.ecunet.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: AN/PSM-6
From: JOHN.SEHRING@ecunet.org

To: boatanchors@theporch.com

Noted a recent FS fpr mil multimeters AN/PSM-6.

Recalled we used them a lot in mid-60s in USAF in Europe. Called 'em "piss-em 6's"!

-John Sehring (Mon, Oct 18, 2004, 2:34 pm) Dell Rapids SD - UCC - WB0EQ
"Live long and prosper." -John 10.10b (adapted)

Date: Thu, 21 Oct 2004 16:02:20 -0400 (EDT)
Message-Id: <200410212002.i9LK2KaW453539@wine.ecunet.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: HP 410B VTVM QUERIES
From: JOHN.SEHRING@ecunet.org

To: boatanchors@theporch.com

Fellow Boatanchoritians,

A nice HP 410B VTVM followed me home from recent Iowa City hamfest for $5.

Yes, it has the RF probe & tube in it (I checked). Seller even gave me a spare RF probe (detached from its host) also with the diode tube in it.

Q's:

1. How do you ck the tube in the probe, or is it just a works/doesn't work kind of thing? Why was the pricey Eimac 2-01C used instead of say, a 6AL5 or a ss thingy?

2. Diff's between 410B and 410C? (I have full B manual. It has "APPOLO" stamped on it...verrry interesting...conjecture? Also, case painted an ugly shade of bathroom green, ugh!).

Thanx.

-John Sehring (Mon, Oct 18, 2004, 1:32 pm) Dell Rapids SD - UCC - WB0EQ
"Live long and prosper." -John 10.10b (adapted)

Message-ID: <41781A53.7000908@internap.com>
Date: Thu, 21 Oct 2004 16:21:39 -0400
From: John Shriver <jshriver@internap.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HP 410B VTVM QUERIES
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

JOHN.SEHRING@ecunet.org wrote:

>A nice HP 410B VTVM followed me home from recent Iowa City hamfest for $5.
>
>1. How do you ck the tube in the probe, or is it just a works/doesn't work
>kind of thing?
>

I suspect you test it by trying to run the calibration procedure. Tek scopes have lots of tube sockets where a "dead" 6DJ8 works just fine.

>Why was the pricey Eimac 2-01C used instead of say, a 6AL5
>or a ss thingy?
>

>
Check out the interelectrode capacitance of the 2-01C's plate. (Might
be easier to find data on the similar EA52/6923.) Really low. Better
HF response, lower circuit loading. Also, I think the lead lengths in
the tube are really short, so low inductance, so that's another HF benefit.

>2. Diff's between 410B and 410C? (I have full B manual. It has "APPOLO"
>stamped on it...verrry interesting...conjecture? Also, case painted an
>ugly shade of bathroom green, ugh!).
>
>
Ugly green was often custom for Raytheon. I have a Tek scope plugin in
that barfucious green, and the backside of the panel skin is marked
Raytheon in magic marker.

Message-ID: <41781F90.3090209@mindspring.com>
Date: Thu, 21 Oct 2004 16:44:00 -0400
From: Garey Barrell <k4oah@mindspring.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HP 410B VTVM QUERIES
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 8bit

JOHN.SEHRING@ecunet.org wrote:

>A nice HP 410B VTVM followed me home from recent Iowa City hamfest for $5.
>
>
Good deal!

>Yes, it has the RF probe & tube in it (I checked). Seller even gave me a
>spare RF probe (detached from its host) also with the diode tube in it.
>
>
Even better. There are more than a few 410B's floating around without
the AC Probe, now we know where at least one of them went!

>Q's:
>
>1. How do you ck the tube in the probe, or is it just a works/doesn't work
>kind of thing? Why was the pricey Eimac 2-01C used instead of say, a 6AL5
>or a ss thingy?
>
>

Have you looked at it yet?

The Eimac 2-01C is a small, closely-spaced, low-capacitance, high-vacuum diode designed for use through the ultra-high frequencies. In measurement work, it is well suited to mounting in a probe and will maintain accuracy in the order of ±1db up to 700MHz. It is useful as an indicator at frequencies as high as 3GHz. It is used as the detector diode in an HP 410B VTVM.

See <http://www.tubecollector.org/2-01c.htm>

I have a couple of spares here somewhere. My 410B and 410C both use the even pricier EA53 diode. Looks the same and works the same,e except it's a 6.3V filament and (of course) just different enough physically that one won't fit the other!

>2. Diff's between 410B and 410C? (I have full B manual. It has "APPOLO"
>stamped on it...verrry interesting...conjecture? Also, case painted an
>ugly shade of bathroom green, ugh!).
>
>

The 410C is mostly solid state, more modern, small square HP meter cabinet. Specs essentially the same.   Check the version against your serial number. There were quite a few changes over the years the 410B was manufactured. I dunno "APPOLO", but if your mean "APOLLO" it quite possibly was used by NASA, We had lots of them around in the early 60's in Huntsville and Houston.

73, Garey - K4OAH
Atlanta

Message-ID: <001c01c4b809$633af080$93e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HP 410B VTVM QUERIES
Date: Fri, 22 Oct 2004 00:33:08 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

> ....1. How do you ck the tube in the probe, or is it just a works/doesn't work kind of thing? .....

The 2-01C and the later EA53 used in the 410B are microwave detector diodes that can withstand a lot more voltage (and abuse) than a solid state diode that can go to such high frequencies. There's hardly any work load placed on those diodes in HP's RF probe so cathode efficiency is not critical. Checking the condition of a diode is relatively easy. Turn on the VTVM and allow a minute or so for warm-up. Apply an AC voltage in the vicinity of 1 volt across a low impedance (like a 600 ohm load for an audio oscillator) and watch the meter's reading. Check for zero drift occsasionally by removing the AC input (but not the low load resistance). Zero drift will eventually settle but look for drift in calibration. Calibration instability (other than caused by a bad ballast tube or a leaky probe output bypass capacitor) is a sign that the diode is nearly dead. Lower line voltage about 10% and see what the effect on calibration is for an overall stability check of the AC function (a small change in calibration is acceptable). I have yet to find a diode that fails to pass the test even though they've been in probes and operated for God only knows how many hours. I now have about 25 410B's in my collection.

On occasion the EA53 has shown up on the eWallow.

Arden Allen
KB6NAX

End of BOATANCHORS Digest 3718
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